egg-laying on our small ivy patch, an interesting garden feature upon which I have managed to place a domestic preservation order. Searching this patch on 29th July revealed larvae of varying sizes as well as many unhatched eggs. When breeding this butterfly from eggs collected on 7th August 1970, a third brood emerged between the 8th and 11th September and I therefore thought it worthwhile to see if another third brood would occur in 1989.

This butterfly is highly parasitised by the host specific *Listrodromus nycthemerus* (Gravenhorst) (ten parasites from fourteen larvae beaten from holly on 21st June, 1970) and in retrospect it would have been wiser to have collected eggs in 1989 rather than larvae. However, I had not anticipated that the rate of parasitisation would be as high as events proved. From ten larvae collected from the garden ivy on 14th August, ten parasites resulted between the 6th and 15th September. That put paid to seeing bred third brood butterflies, but compensation came on 19th September when three blues were seen flying in Lower Caversham, on the following day a female was flying in our own garden and the final specimen seen there on 29th September.

These may not be particularly late dates, for others have recorded Holly Blues in October, but the question does arise upon which foodplant would the late eggs be laid and would the larvae have time to complete development before the foodplant became unavailable?

In other years I have seen Holly Blues of the spring brood egg laying in the garden on a cultivated *Cornus* and on a species of *Cotoneaster,* but by late September the *Cornus* has only withered leaves available and the *Cotoneaster* is covered with rather tough berries. Ivy may be the answer, but this flowered very early in 1989 and by now the berries are well developed and fairly hard.

It will be interesting to see how the butterfly fares in 1990. — B.R. BAKER, Reading Museum and Art Gallery, Reading RG1 1QL.

Pyracantha as a possible foodplant of Holly Blue butterflies *Celastrina argiolus* (Linnaeus) (Lep.: Lycaenidae) in the London Area.

Lepidopterists resident in the south-east of England can not have failed to notice that 1989 was an exceptionally good year for Holly Blue butterflies *Celastrina argiolus* (Linnaeus) and I have heard that this situation was repeated elsewhere in the country. In the London area (defined by the London Natural History Society as being a circle of radius twenty miles based upon St Paul's Cathedral), butterflies were in great number, with several of this normally near-solitary species being seen flying together on many occasions. Adults, usually males, were seen in a great many areas from which they were apparently absent during the intensive searching from 1980 to 1986 which culminated in the publication of *The Butterflies of the London Area* (London Natural History Society, 1987).

In a normal year in the London Area, adults appear around mid-April (earliest 2nd April in 1983) and typically lay eggs on either holly *Ilex aquifolium* or snowberry *Symphoricarpos* sp. I was rather surprised to discover that volume 7 (1) of *The moths and butterflies of Great Britain and Ireland* (Harley Books, 1989) lists only dogwood *Swida sanguinea* and gorse *Ulex europaeus* as alternatives to the more usual larval foodplant. In the London Area snowberry is used regularly and enables the butterfly to flourish in areas where holly is absent. This is particularly true in the Central London area. The progeny of this spring brood form the second generation of adults in late July, lasting through until the end of August or, rarely, September (latest recorded was 9th September in 1983). These adults lay eggs on ivy and in a normal year the pupae of this generation will overwinter.

In 1989, however, it became apparent that within the generally increased numbers of adult butterflies on the wing, there was a definite pattern of rise and fall, of the type which usually matches the voltinism of the species involved. Thus, there was a peak of adults in April and May 1989, tailing-off into June so that by the middle of June only a very few late emergers were still in evidence. By July the first brood had finished and there was a clear gap between the end of the first brood and the start of the second at the end of July/early August. However, the summer brood, on the wing from late July to at least 23rd September, transpires to conceal not one, but two peaks of population; the first within the first two weeks of August and the second, rather smaller, around the second and third weeks of September. The question that this poses is whether the double peak represents a split emergence of the second brood or whether in fact a third brood is indicated.

The evidence against a third brood is fairly strong. There is unlikely to have been adequate time for a second brood adult to produce progeny by the second week of September, whilst pupae from the second brood of adults usually overwinter and so it seems unlikely that they would have emerged in the continuing warm weather. One must, therefore, consider the possible causes of a split emergence. The most obvious choice, for 1989, would be the unusually prolonged hot, dry weather, of the kind we have not seen since 1976. Whilst this may be either partially or totally responsible, I prefer to consider the possibility of another alternative foodplant and, that the development rate on the two differing pabula is likely to vary sufficiently to produce a double peak.

The evidence for an alternative foodplant for the progeny of spring generation *argiolus* all heralds from East London. A telephone caller at the Museum wondered why the Holly Blues in the Ilford, Essex area were taking such great interest in the *Pyracantha* growing locally. This was rather fortuitous, since I had intended to examine the local *Pyracantha* for the early generation of *Phyllonorycter leucographella* which is abundant locally. Armed with this double excuse to leave the paper-work behind I

first visited Central Park in East Ham. *Leucographella* was almost instantly located but the greater interest lay in the five Holly Blue butterflies which were all sitting on the *Pyracantha* bushes having the appearance of being freshly emerged. There was no ivy, holly, snowberry or any other known foodplant nearby. Intrigued, I determined to visit a few other *Pyracantha* patches in East Ham and to my surprise, of seven patches visited (including Central Park) five had *argiolus* either flying in very obvious association with them or else had the adult insects, again all apparently freshly emerged and nowhere near recorded foodplants, sitting in the bushes. The visits were all made from 13th to 15th September 1989.

Though this evidence is purely circumstantial, it does seem to indicate that *Pyracantha* may be implicated as a foodplant of the larvae of the first brood *argiolus* and, given the dates of my visits, that insects bred on *Pyracantha* are slower to develop and will emerge slightly later than insects bred on the more conventional holly.

It would be most interesting indeed to see if my East London findings are repeated elsewhere. — COLIN W. PLANT, Passmore Edwards Museum, Romford Road, Stratford, London E15 4LZ.

Late records of summer moths, and an appeal for information

A female Lilac Beauty, *Apeira syringaria* (L.) at Long Wittenham, Oxfordshire, on 21st September 1989, and a male Swallow-tailed, *Ourapteryx sambucaria* (L.), at Headington, Oxford, on 5th October 1989 are remarkably late records of species that normally appear in June and July. Both specimens came to m.v. light and both are fresh-looking.

The warm, dry summer may have produced numerous records of species "out of season". It is tempting to think of them as being a partial second generation, but the possibility of delayed emergence in response to summer drought must also be entertained. In collaboration with Paul Waring of the Nature Conservancy Council, Peterborough, I would like to assemble and analyse all out of season records of macro-moths for 1989. This should enable us to determine which of the above possibilities is likely to be correct. Please send records to me. — DENNIS F. OWEN, 2 Shelford Place, Headington, Oxford OX3 7NW.

Is the population of *Mythimna pallens* (Linnaeus) (Lep.: Noctuidae) sometimes reinforced by immigration?

None of the standard text-books suggests that this species is ever a migrant. It was, as in certain years, common from mid-August to mid-September, 1989 in Saffron Walden, nightly numbers in the light-trap ranging from two or three to about 50. However, on the one night 6/7th September the number certainly exceeded 1,000. I have 15 egg-trays in the trap and the count on a typical tray was between 70 and 80 (the moths were too lively to be more precise); added to these were scored on the sides of the